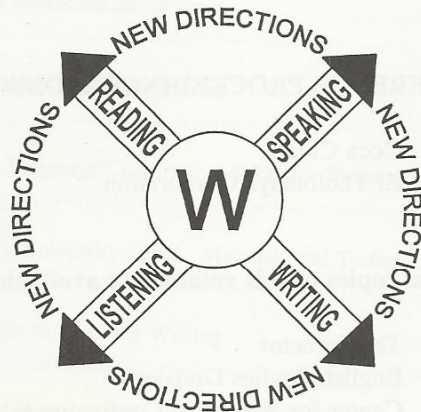


**PROCEEDINGS  
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THE FIRST EFL SKILLS CONFERENCE**



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# Effects of Cooperative Versus Competitive Learning on EFL Students' Writing

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## Introduction

Some educators and psychologists (e.g., Ausubel 1968; Prvulovich 1982) see individual competition as a cornerstone in the development of self-reliance and as a powerful motive in stimulating effort and productivity. Others (e.g., Bailey 1983; Schumann 1980) see competition as a source of hostility, self-doubt and anxiety which in turn decrease learning outcomes. Similarly, some educators and psychologists (e.g., Johnson 1981; Smagorinsky 1989) see that cooperation can be a beneficial alternative to competition as it (the former) decreases prejudice and increases student motivation, interaction and achievement. Others (e.g., Kerr 1983; Salomon and Globerson 1989) see that cooperation is a source of problems such as free-riding, diffusion of responsibility and social loafing, and that these problems may in turn lead to motivation losses among group members and debilitate team performance.

In subject areas other than writing, educational and psychological researchers have differed in their conclusions about the effects of cooperative versus competitive learning on student achievement. Many researchers (e.g., Sharan 1980; Skon et al. 1981) have concluded that cooperative learning experiences result in higher achievement than competitive ones. Others (e.g., Clifford 1971; Michaels 1977) have indicated that competition among individuals is more effective than cooperation in increasing student achievement. Still others (e.g., Wheeler and Ryan 1973) have reported no significant differences on achievement tests between cooperative and competitive groups.

In subject areas other than writing, educational and psychological researchers have also differed in their conclusions about sex differences in performance under cooperative and competitive conditions. Senior and Brophy (1973) have reported that males are more responsive to competition and females are more responsive to cooperation in terms of achievement performance. Nowicki et al. (1978) have concluded that females increase their performance when competing against males or cooperating with females. Webb (1984) has concluded that females and males show equal achievement in groups with equal members of females and males. Johnson et al. (1986) have reported no significant differences in achievement between males and females under cooperative and competitive conditions.

In the field of writing, no studies have as yet focused directly on the effects of cooperative versus competitive learning on students' writing. Existing research in this field has focused primarily on providing the student writer with feedback from an audience of peers (e.g., Flynn 1984; Karegianes et al. 1980; Katstra et al. 1987) and secondly on cooperative writing experiences without contrasting them with competitive ones (e.g., Daiute 1986; O'Donnell et al. 1985; Stevens et al. 1987).

The contradictory results in the previous studies, in addition to the lack of research aimed at determining the effects of cooperative versus competitive learning on the quality and quantity of writing, highlight the need for the present study. The first purpose of this study, therefore, is to compare the effects of cooperative versus competitive learning experiences on the quality and quantity of EFL students' writing. A second purpose is to



explore the effects of gender on the overall writing performance under cooperative and competitive conditions.

### Research Hypotheses

1. There is no statistically significant difference between mean gain score of the cooperative group and that of the individual competitive group with respect to the quality of writing on the pre- and post-test.
2. There is no statistically significant difference between mean gain score of the cooperative group and that of the individual competitive group with respect to the quantity of writing on the pre- and post-test.
3. There is no statistically significant difference between mean gain scores of boys and girls with respect to overall writing performance under the cooperative condition on the pre-and post-test.
4. There is no statistically significant difference between mean gain scores of boys and girls with respect to overall writing performance under the individual competitive condition on the pre-and post-test.

### Method

#### Subjects

The subjects of the study ( $n = 88$ ) were 2nd year EFL students enrolled in two departments (Arabic and French) at the Faculty of Education, Suez Canal University, Suez Branch. The participants were randomly assigned to one of the two treatment conditions by section. In the cooperative condition there were 17 males and 19 females; in the competitive condition there were 29 males and 23 females. All subjects participated in the study as part of a course requirement and were unaware throughout the experiment that they were participating in this study.

#### Research Variables

The *independent* variables for this study were group cooperative and individual competitive learning experiences. In the cooperative condition, students were first divided into teams. Within each team, members divided the assigned composition topic into paragraphs, each of which was written by an individual or a pair of students. All members of the team then revised and combined their individual products into a joint product and submitted it to the teacher to locate mistakes and give it back to them for cooperative correction (Slavin 1983a and b).<sup>1</sup>

In the individual competitive condition, each student wrote about the assigned topics alone, trying to do better on the assignments than other students. The teacher, then, used norm referenced grading to rank students from best to worst. The best compositions got As and the worst ones got Fs (Jacobs 1988).<sup>2</sup> Additionally, the teacher gave sufficient clues to enable self-correction to be made.

The *moderator* variables were boys and girls under cooperative and competitive conditions. The *dependent* variables were EFL students' writing from the standpoint of quality and quantity.

#### Instruments

The instruments used in the study were:

1. The Michigan Composition Test (Model 2) as a pre- and post-test.
2. An analytic scoring instrument developed by the researcher (1991: 221-226).



According to this instrument the score of a composition was distributed among these five components: a) ideas, b) organization, c) grammatical structures, d) word-choice, and e) mechanics. For the first purpose of the present study, the first two components (ideas and organization) were combined to yield a scale that measured the quantity of writing and the last three components (grammatical structures, word-choice and mechanics) were combined to form a scale that measured the quality of writing. For the second purpose the five components were used to measure the overall writing performance.

### Scoring

Based on the analytical scoring instrument referred to earlier, all the pre- and post-test compositions were scored independently by the researcher and a colleague and the average of the two scores became the final score. During rating, reliability checks were conducted at four points and reliability estimates ranged from 0.80 to 0.92 with a mean reliability of 0.84.

### Procedures

Prior to the start of the study, all subjects were pre-tested. Then, based on the pre-test scores, students in the cooperative condition were assigned to ten teams that were heterogeneous in writing ability, with one high, one to two medium, and one low-ability students in each team.

After that, all subjects were instructed by the researcher in twenty sessions (one per week) over a 5-month period during the 1992-1993 academic year. Throughout this duration, the same composition topics were assigned to both cooperative and competitive groups.

At the end of the study, all subjects were individually post-tested and the pre-/post-test mean gain scores were analyzed through the following statistical procedures:

1. Calculating the standard deviation of the difference between the pre-test mean and the post-test mean of each group using the formula stated by Mason and Bramble (1989:116).
2. Computing the t-value of the difference between gain score means for the two experimental groups, and for boys and girls under each experimental condition by means of the formula stated by Silverman (1985:300).

### Results and Discussion

Statistical analysis of the data gathered via the pre- and post-test revealed a significant difference between the cooperative and competitive learning groups in the quality of writing, in favor of the former group.

**Table 1: The Value of "t" for the Difference in Gain Score Means of the Two Experimental Groups on the Quality of Writing**

Group	$\bar{X}_1$	$\bar{X}_2$	$\bar{D}$	SD	T	Significance
Cooperative	2.21	3.17	0.96	0.95	2.125	0.05
Competitive	2.16	2.39	0.23	1.88		

As shown in Table 1, the difference between mean gain-scores of the two experimental groups was 0.73, which was significant at the 0.05 level ( $t = 2.125$ ). Therefore, the first null hypothesis was rejected. This result may be attributable to the following factors:

1. Heterogeneous writing abilities in the cooperative teams might allow all members to benefit from one another's strong points in grammatical structures, vocabulary and mechanics of writing.
2. The range of working vocabulary, grammatical structures and mechanics of writing practiced by students might be wider in the cooperative group than in the individual competitive group.
3. Cooperative writing experiences, compared with competitive ones, might promote more positive attitudes towards writing which could in turn motivate students to learn more about the basic elements of this skill.

**Table 2: The Value of "t" for the Difference in Gain Score Means of the Two Experimental Groups on the Quantity of Writing**

Group	$\bar{X}_1$	$\bar{X}_2$	$\bar{D}$	SD	T	Significance
Cooperative	1.83	2.91	1.08	0.82	2.804	0.01
Competitive	1.37	1.62	0.25	1.62		

As shown in Table 2, a statistically significant difference was also found between the cooperative and competitive groups in the quantity of writing in favor of the former group. The difference between mean gain scores of the two experimental groups was 0.83, which was significant at the 0.01 level ( $t = 2.804$ ). Therefore, the second null hypothesis was also rejected. This result may be due to the following factors: 1) cooperative writing experiences, compared with competitive ones, might promote the use of more reasoning strategies and critical thinking competencies which are inherent features of the process of composition writing; 2) the greater improvement of the quality of writing in the cooperative learning group, as indicated in Table 1, might enable students in this group to convey considerably more ideas than those in the individual competitive group; 3) cooperative writing experiences, compared with competitive ones, might promote more self-confidence which could in turn encourage the generation of ideas; 4) competitive writing experiences, compared with cooperative ones, might promote high anxiety and self-doubt which could in turn inhibit the generation of ideas, and 5) continual exposure to the ideas of other students might promote the organization of ideas.

**Table 3: The Value of "t" for the Difference in Gain Score Means of Males and Females on the Overall Writing Performance Under the Cooperative Condition**

Sex	$\bar{X}_1$	$\bar{X}_2$	$\bar{D}$	SD	T	Significance
Males	3.98	6.16	2.18	0.91	0.92	NS
Females	4.10	6.00	1.90	0.86		

As shown in Table 3, no statistically significant difference existed between the overall writing performance of males and females under the cooperative condition. The difference between mean gain scores of boys and girls was 0.28, which was not significant ( $t = 0.92$ ). Therefore, the third null hypothesis was accepted. This result provides an empirical confirmation of the theory which claims that gender differences in achievement are due to environmental factors rather than biological ones.



**Table 4: The Value of "t" for the Difference in Gain Score Means of Males and Females on the Overall Writing Performance Under the Competitive Condition**

Sex	$\bar{X}_1$	$\bar{X}_2$	$\bar{D}$	SD	T	Significance
Males	3.63	4.29	0.66	1.65	0.73	NS
Females	3.43	3.73	0.30	1.85		

As shown in Table 4, statistical analyses further indicated no significant difference in the overall writing performance of males and females under the competitive condition. The difference between mean gain scores of boys and girls was 0.36, which was not significant ( $t = 0.73$ ). Therefore, the fourth null hypothesis was accepted. This result provides a further empirical confirmation of the theory which claims that the differences in achievement between males and females are due to environmental factors rather than biological ones.

#### Implications

The findings of the study provide evidence that group cooperative learning is much more effective in promoting both the quality and quantity of EFL students' writing for boys and girls than is individual competitive learning. However, merely having students write in teams is not a guarantee that the quality and quantity of their writing will be improved. To ensure the success of cooperative learning in teaching writing, the following factors that contributed to its effectiveness in the present study, should be considered:

1. Allocating students to mixed-ability teams to help them compensate for one another's deficiencies as writers.
2. Having students work in small groups to increase writing practice opportunities.
3. Making each team member responsible for one part of the writing task to avoid loafing by less active and less able students, in addition to the collective responsibility for the final product.
4. Allowing team members to write freely without close monitoring by the teacher and offering assistance when the need arises.
5. Ensuring that all team members are involved in the writing task by moving from one team to another.
6. Having students experience cooperative writing for a long term to help them become aware of and develop the skills they need to write cooperatively (such as the ability to manage conflict and to trust one another).
7. Avoiding intergroup competition.
8. Utilizing cooperative writing with mature EFL students to avoid discipline problems.

#### Suggestions for Further Research

The first suggestion for further research concerns the replication of this study with a new, larger sample to verify the results found here. The second suggestion is to examine the effects of intergroup competition versus interpersonal competition on EFL students' writing. A final suggestion is to examine the effects of intergroup cooperation versus intergroup competition on EFL students' writing.

## Notes

1. The cooperative method used in this study is structured in some ways similarly to Slavin's method, but with one important distinction: it spurns the competitive element.
2. This grading system was used to help each student know whether he was ahead or behind the other students.

## References

- Ausubel, D.P. (1968). *Educational Psychology, A Cognitive View*. New York: Holt, Rinehart and Winston, Inc.
- Bailey, K.M. (1983). Competitiveness and anxiety in adult second language learning: Looking at and through the diary studies. In Seliger, H.W. and Long, M.H. (eds.) *Classroom-Oriented Research in Second Language Acquisition*. pp. 67-103. Rowley, MA: Newbury House.
- Clifford, M.M. (1971). Motivational effects of competition and goal-setting in reward and nonreward conditions. *Journal of Experimental Education* 39. pp. 11-16.
- Daiute, C. (1986). 1 and 1 make 2? Patterns of influence by collaborative authors. *Written Communication* 3:2. pp. 382-408.
- El Koumy, A.A. (1991). *Comparing the Effectiveness of Three Strategies of Teaching Composition: Guided, Free and Guided-Free*. Unpublished Ph.D. Thesis: Menoufia, Faculty of Education.
- Flynn, E. (1984). Students as readers of their classmates' writing: Some implications for peer critiquing. *Writing Instructor* 3. pp. 120-128.
- Jacobs, G. (1988). Cooperative goal structure: A way to improve group activities. *ELT Journal* 42:2. pp. 97-101.
- Johnson, D.W. (1981). Student-student interaction: The neglected variable in education. *Educational Researcher* 10. pp. 5-10.
- Johnson, R., Johnson, D.W. and Stanne, M. (1986). Comparison of computer-assisted cooperative, competitive, and individualistic learning. *American Educational Research Journal* 23. pp. 382-392.
- Karegianes, M., Pascarella, E. and Pflaum, S. (1980). The effects of peer editing on the writing proficiency of low-achieving tenth grade students. *Journal of Educational Research* 73:4. pp. 203-207.
- Katstra, J., Tollefson, N. and Gilbert, E. (1987). The effects of peer evaluation on attitude toward writing and writing fluency of ninth grade students. *Journal of Educational Research* 80:3. pp. 168-172.
- Kerr, N.L. (1983). Motivation losses in small groups: A social dilemma analysis. *Journal of Personality and Social Psychology* 45:4. pp. 819-828.
- Mason, E.J. and Bramble, W. J. (1989). *Understanding and Conducting Research* (2nd ed.). New York: McGraw-Hill Book Company.
- Michaels, J.W. (1977). Classroom reward structures and academic performance. *Review of Educational Research* 47. pp. 87-98.
- Nowicki, S. Jr., Duke, M. P. and Crouch, M. (1978). Sex differences in locus of control and performance under competitive and cooperative conditions. *Journal of Educational Psychology* 70:4. pp. 482-486.
- O'Donnell, A., Dansereau, D., Rocklin, T., Lambiotte, J., Hythecker, V., Larson, C. and Young, M. (1985). Cooperative writing: Direct effects and transfer. *Written Communication* 2. pp. 307-315.



- Prvulovich, A. (1982). In defence of competition. *Journal of Philosophy of Education* 16. pp. 77-88.
- Salomon, G. and Globerson, T. (1989). When teams do not function the way they ought to. *International Journal of Educational Research* 13:1. pp. 89-99.
- Schumann, F.E. (1980). Diary of a language learner: A further analysis. In Krashen, S.D. and Scarcella, R. (eds.) *Research in Second Language Acquisition*. Rowley, MA: Newbury House.
- Senior, K. and Brophy, J. (1973). Praise and group commotion as motivating incentives for children. *Psychological Reports* 32. pp. 951-958.
- Sharan, S. (1980). Cooperative learning in small groups: Recent methods and effects on achievement, attitudes and ethnic relations. *Review of Educational Research* 50. pp. 241-271.
- Sharpe, P.J. (1982). *How to Prepare for the Michigan Test Battery*. New York: Barron's Educational Series, Inc.
- Silverman, F.H. (1985). *Research Design and Evaluation in Speech-Language Pathology and Audiology* (2nd ed.). New Jersey: Prentice-Hall, Inc.
- Skon, L., Johnson, D. and Johnson, R. (1981). Cooperative peer interaction versus individual competition and individualistic efforts: Effects on the acquisition of cognitive reasoning strategies. *Journal of Educational Psychology* 73:1. pp. 83-92.
- Slavin, R.E. (1983a). *Cooperative Learning*. New York: Longman.
- Slavin, R.E. (1983b). *Student Team Learning: An Overview and Practical Guide*. Washington, DC: National Education Association.
- Smagorinsky, P. (1989). Small groups: A new dimension in learning. *English Journal* 78:2. pp. 67-70.
- Stevens, R.J., Madden, N.A., Slavin, R.E. and Farnish, A.M. (1987). Cooperative integrated reading and composition: Two field experiments. *Reading Research Quarterly* 22:4. pp. 433-454.
- Webb, N.M. (1984). Sex differences in interaction and achievement in cooperative small groups. *Journal of Educational Psychology* 76:1. pp. 33-44.
- Wheeler, R. and Ryan, F. (1973). Effects of cooperative and competitive classroom environments on the attitudes and achievement of elementary school students engaged in social studies inquiry activities. *Journal of Educational Psychology* 65:3. pp. 402-407.